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Factors Influencing Teacher and Adminstrators' Knowledge and Attitudes about Adolescent Depression, Suicide, and Prevention

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Abstract

To date, research has yet to be conducted that examines U.S. secondary school teachers' and administrators' attitudes toward intervening with potentially depressed and/or suicidal students. Additionally, research is needed to identify the demographic characteristics of educators that are associated with general knowledge of adolescent suicide and the risk factors and warning signs that often accompany it. The purpose of the present study was to examine the following hypotheses: 1) certain characteristics (e.g. gender, years of experience with educating children, the amount of training received on adolescent depression/suicide, and knowledge of adolescent suicide and depression) are better predictors of attitudes toward adolescent depression and suicide, and 2) teachers and administrators who are more knowledgeable about adolescent depression and suicide are more likely to report positive attitudes toward preventing these acts in the school setting. Participants included 122 teachers, administrators, and staff members from secondary schools in Illinois. Participants responded to a 47-item questionnaire that contained items from four different survey scales: the Depression Stigma Scale (DSS), the Suicide Stigma Scale (SSS), the Attitudes Toward Suicide Prevention Scale (ASPS), and the Suicide Knowledge Survey (SKS). Results indicated that knowledge of adolescent depression and suicide was the best predictor of participants' scores on survey scales that measured depression stigma, suicide stigma, and attitudes toward suicide prevention. Overall, greater knowledge of adolescent depression and suicide was associated with less stigmatized attitudes toward depression and suicide, and more positive attitudes toward suicide prevention. Limitations of the study and implications for future research are also discussed.

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DEDICATION

This study is dedicated to my husband, Clayton Lee Quick. Your endless love and support continues to pull me through even my darkest days. And to my mom, Angie, and my siblings, Matt, Kate, and Kris, thank you for always standing by me. The support I have in all of you empowers me to rise above and beyond any obstacles I may encounter.

Factors Influencing Teacher and Administrators' Knowledge and Attitudes about Adolescent Depression, Suicide, and Prevention

In the past it had been suggested that adolescents are not cognitively or psychologically mature enough to experience symptoms related to depression, and thus, the condition has historically been viewed as a disorder that mainly affects adults (Jha et al., 2017). But as we now know, depression is one of the most prevalent mental disorders among adolescents and is typically characterized by mood reactivity and irritability, as well as other difficulties such as anxiety, eating and sleeping disruptions, truancy, and/or a decline in academic performance (de Jonge-Heesen et al., 2016). According to Moreh and O'Lawrence (2016), an estimated 10-15% of adolescents and young adults experience symptoms of depression at any given time, and the prevalence of depressive disorder diagnoses among the adolescent population has drastically increased within the last several decades. More specifically, roughly 1 out of every 12 American adolescents (8.3%) are currently suffering from symptoms of depression (Moreh & O'Lawrence, 2016). Research has yet to be conducted that examines U.S. secondary school teachers' and administrators' attitudes toward intervening with a potentially depressed and/or suicidal adolescent. Research is also needed to identify the demographic characteristics among educators that are associated with general knowledge of adolescent suicide and the risk factors and warning signs that often accompany it. Thus, the purpose of the present study is to examine the demographic characteristics that best predict secondary teacher and administrator attitudes and knowledge of adolescent depression, suicide, and prevention. As secondary school teachers and administrators have the most contact with adolescents, it is important that they have a solid foundation from which they are able to

understand and get help for students who are struggling with depression and/or suicide ideation. The following factors are typically associated with adolescent depression and are thus important for secondary school personnel to recognize.

Factors Associated with Adolescent Depression

Gender. There are a variety of factors that contribute to the development of adolescent depression. Gender is one such factor that has consistently appeared in the depression literature. Several sources have indicated that female adolescents are more likely to suffer from depression than their male counterparts (de-Jonge et al., 2016; Jha et al., 2017; Mestre, Vidal, & Garcia, 2017; Moreh & O'Lawrence, 2016; Quiroga, Lopez-Rodriguez, & Willis, 2017). Explanations for the gender differences in depression have suggested that female adolescents become more vulnerable to the development of depression when they reach puberty. Issues revolving around the early onset of puberty for girls, including body satisfaction, and hormonal changes, may contribute to the development of depressive symptoms in adolescent girls (Jha et al., 2017). According to Moreh and O'Lawrence (2016), female adolescents are also nearly two times more likely than male adolescents to develop depressive disorders after the age of 14, possibly because of the differences in coping styles between girls and boys during puberty. The emphasis of today's media on female adolescents being thin may also contribute to their negative self-image and depressive disorders beginning around the age of puberty (Moreh & O'Lawrence, 2016).

Family History and Childhood Experiences. Another factor that is frequently mentioned in the depression literature is a history of depression among family members and/or traumatic childhood experiences. Researchers have found that children who are

raised in loving, supportive, and stimulating environments are less likely to develop depression when compared to children who are frequently exposed to adversity and raised in abusive, unstable, and/or negative environments (e.g., Moreh & O'Lawrence, 2016; Quiroga et al., 2017). Moreh and O'Lawrence (2016) also suggest that children of depressed parents are far more likely to develop depressive symptoms themselves during adolescence and young adulthood, which may be due to genetic disposition or parental modeling of depressive behaviors.

Traumatic experiences during childhood may also contribute to the development of adolescent depression. Such events may include the loss of a loved one; exposure to violence; physical, sexual, and/or emotional abuse; parental divorce or separation; reduced family income or resources, etc. (Bohman, Laftman, Paaren, & Johnson, 2017; Hadzikapetanovic, Babic, & Bjelosevic, 2017; Moreh & O'Lawrence, 2016).

Substance Abuse. Another factor associated with adolescent depression is substance abuse. According to Moreh and O'Lawrence (2016), adolescents who suffer from depression also typically suffer from some sort of substance abuse including but not limited to cigarette smoking, alcohol consumption, and the utilization of illegal substances such as marijuana, cocaine, or methamphetamines. According to Goldstein (2009), substance abuse is approximately twice as common among adolescents with depression than it is in adolescents without depression. More specifically, an estimated 29.2% of adolescents with depression engage in risky behaviors, such as substance abuse, whereas only 14.5% of adolescents without depression engage in these same behaviors.

Signs and Symptoms of Adolescent Depression

In addition to recognizing the factors that contribute to the development of depression among adolescents, it is important to know the signs and symptoms of depression. There are a number of common signs and symptoms of depression, including a loss of interest in activities that the individual previously enjoyed, insomnia or excessive sleeping, poor appetite, impaired concentration, irritability, restlessness, a persistent sadness or feelings of hopelessness, significant weight loss or weight gain, social withdrawal or isolation, fatigue or a loss of energy, persistent aches and pains, consistent feelings of worthlessness and/or guilt, and thoughts of death and/or suicide (Jha et al., 2017; Moreh & O'Lawrence, 2016).

Adolescents have been known to be reluctant to seek help for their mental health issues, including depression and its symptoms. Because of this reluctance to report and seek help for depressive symptoms, it is important for parents, school personnel, and others who work closely with adolescents to be educated on adolescent depression and what it means for the individuals it impacts (de Jonge-Heesen et al., 2017).

Prevalence of Adolescent Suicide

Depression is often accompanied by an array of problems such as alcohol abuse, substance abuse, and suicide. Of these potential problems, suicide is obviously the most devastating consequence of adolescent depression (Moreh & O'Lawrence, 2016). According to the Centers for Disease Control and Prevention (2010), suicide is the third leading cause of death for adolescents in the U.S. and claims nearly 2,000 adolescent lives each year. This is equivalent to approximately 12% of the deaths that occur in the adolescent age group annually (Moreh & O'Lawrence, 2016; Valois et al., 2015).

Researchers have also found that the lifetime prevalence of suicide ideation is very low around age 10 but rapidly increases between the ages of 12 and 17 (Nock et al., 2013).

Factors Associated with Adolescent Suicide

Gender. Gender is a factor that has been consistently mentioned in the adolescent suicide literature. As previously discussed, adolescent females are at an increased risk for the development of adolescent depression. Research has indicted that adolescent females are also at an increased risk for suicide ideation, plans, and attempts. Although this information seems to be in conflict with the findings of Gunduz and his colleagues, it is important to note that adolescent females have a higher rate of nonlethal suicidal behaviors, indicating more unsuccessful suicide attempts or nonlethal methods of suicide completion. Adolescent males, on the other hand, have higher rates of suicide-related deaths due in part to the use of more lethal methods such as firearms. All in all, it has been determined that adolescent females have higher rates of suicide ideation and plans, whereas adolescent males have higher rates of suicide attempts and completions (Gunduz et al., 2016; Hooper et al., 2015; Lewinsohn et al., 1993; Nock et al., 2013).

Culture, Race, and/or Ethnicity. Suicide is currently the second leading cause of death among American Indian/Alaskan Native adolescents (Goldston et al., 2008). This group of adolescents also has the highest prevalence rate of suicide attempts, followed by Hispanic females, African American females, and finally White females (Goldston et al., 2008; Mueller et al., 2015). Additionally, Hispanic adolescents have the highest rates of suicide ideation, whereas African American males and females have recently surpassed their White counterparts in terms of suicide attempts (Hooper et al., 2015; Molock et al., 2014; Rew et al., 2001). According to several studies, suicide rates for African American

adolescents between the ages of 15 and 19 years have increased by 126% over a 15-year period (Bennett & Joe, 2015; Borowsky et al., 2001; Fitzpatrick et al., 2008; O'Donnell et al., 2004). The suicide rate among Asian American and Pacific Islander adolescents, however, is far lower than the rates of other racial/ethnic groups, including White adolescents (Goldston et al., 2008).

Goldston et al. (2008) and Hooper et al. (2015) indicated that there are a wide range of other influences in racially/culturally diverse communities that can influence the development of suicide ideations, including a history of family suicide, mental health disorders, racism, discrimination, religious affiliation, racial identity, and family cohesion. These are among the prominent factors that may potentially influence the development of future suicide ideations and attempts among members of diverse backgrounds.

Mental Health. It is estimated that roughly 89.3% of adolescents with a history of suicide ideation suffer from at least one DSM disorder and roughly 96.1% of adolescents with a history of suicide attempts suffer from at least one DSM disorder (Nock et al., 2013). The most prevalent mental disorders that occur in adolescents with histories of suicide ideation and attempts are major depressive disorder (MDD) and/or dysthymia, followed by specific phobias, oppositional defiant disorder (ODD), intermittent explosive disorder (IED), substance abuse, and finally, conduct disorder (CD) (Nock et al., 2013).

Additionally, previous suicidal behaviors among adolescents are among the best predictors of future suicide ideation, plans, and attempts (Hooper et al., 2015; Lewinsohn et al., 1993; Lewinsohn et al., 1994). Hooper and her colleagues found that the

probability of future suicide ideations significantly increased when adolescents reported previous suicide ideations. More specifically, there was a positive correlation between the number of previous suicide ideations and the likelihood of future suicide ideations.

Sexual Orientation. According to Molock and her associates (2014), LGBT youth are at an increased risk for suicide ideation when compared to their heterosexual peers. Research has shown that when youths attended schools with cultures that stigmatized LGBT populations, suicide ideation became more likely (Mueller et al., 2015). This increase in the rates of suicide among LGBT adolescents is in part due to the increased rates of peer victimization among this group of adolescents (Moon et al., 2015). Results taken from the 2011 National School Climate survey indicated that, a majority of the lesbian, gay, bisexual, and transgendered adolescents in 6th to 12th grade reported experiencing some form of harassment (e.g. verbal, physical, cyber) from their peers (Mueller et al., 2015).

Other Factors. Nock et al. (2013) and Lewinsohn et al. (1993) found a significant relationship between the number of biological parents a child lived with and the likelihood of future suicide attempts. The likelihood of future suicide attempts increased when children did not live with both biological parents (Lewinsohn et al., 1993; Nock et al., 2013). Venta et al. (2017) found that the risk of suicide increased when adolescents reported their caregivers as emotionally or otherwise unavailable, as well as when there was a lack of emotional connection to caregivers. Additionally, research has suggested that an estimated 25-50% of individuals who attempt or complete suicide suffer from some sort of alcohol or substance abuse disorder (e.g. Juon & Ensminger, 1997; Valois et al., 2015). Research examining other factors associated with adolescent

suicide has included factors such as physical and/or sexual abuse, violence victimization, conduct disorder, low GPA, eating disorders, access to weapons, being threatened or injured at school, and fighting in or out of the school context. All of these factors have been identified as risk factors for the development of future suicide ideation and possible suicide attempts among adolescents (Moon et al., 2015).

School-Based Depression and Suicide Prevention

Given the rising rates of adolescent depression and suicide over the past few decades, some schools have addressed these concerns by putting prevention programs in place (Gibbons & Studer, 2008). School authorities, however, are left to determine which methods they believe will best prepare their teachers and staff members for situations involving adolescent depression and/or suicide. The following are a few of the different methods and components of training programs for teachers, administrators, and even students.

School Staff and Teacher Training. There are several options for training school personnel about the risks associated with depression and suicide, including curriculum-based programs for students, faculty and staff in-service trainings, and/or school-wide screening programs used to identify students at risk for depression or suicide (Gibbons & Studer, 2008). Many of these programs can be effective in raising teachers' and staff members' awareness of depression and suicide. Gibbons and Studer (2008) found that awareness programs both increased knowledge about the warning signs of depression and suicide, and increased teachers' confidence in their ability to help potentially depressed or suicidal students.

According to Gibbons and Studer (2008), there are several key components of suicide awareness programs for teachers and school personnel. At the very least, information regarding the demographics of typical suicide-attempters should be provided. To foster an awareness of depression and suicide, teachers and other school staff members must be mindful of how depression and suicide ideation is typically manifested in adolescent populations. Schools should be able to create teacher and administrator awareness of depression and suicide using the characteristics that researchers have found to be common among adolescents who are depressed or who attempt and/or commit suicide (e.g. substance abuse, racial/ethnic backgrounds, sexual orientation, etc.). Additionally, information regarding the demographics of the surrounding community should be provided. If a community is demographically at a higher risk for adolescent depression or suicide (e.g. a poverty-stricken community or a community with higher rates of violence and crime), this information should be provided during the training program.

Gibbons and Studer (2008) also suggested that a second component of awareness and prevention programs should revolve around debunking commonly-held misconceptions about depression and suicide. The largest of these misconceptions is believing that young children do not commit suicide. On average, roughly 33 children under the age of 12 years old commit suicide eeveery year in the U.S. (Bridge et al., 2015). Believing that only older children and adults commit suicide may lead professionals to underestimate the difficulties or suicidal intents of students that come to them for help.

Gibbons and Studer (2008) have indicated that the most effective suicide awareness programs typically include information regarding the risk factors for both depression and suicide, a component requiring participants to understand their own personal attitudes about suicide, and a delineation of community resources that teachers can utilize in situations involving depressed or suicidal students. Furthermore, the most effective programs provide clear and empirical evidence of the increasing rates of adolescent depression and suicide (Gibbons & Studer, 2011).

Despite the great need for suicide awareness and prevention programs within the school system, there are still a large number of schools in the U.S. that have yet to institute any type of educational program. According to Gibbons and Studer (2008), some school administrators refuse to intervene in adolescent depression and suicide for fear of how the public will react to introducing these topics to children. Other school administrators simply do not have enough knowledge about depression, suicide, or the relevant statistics; whereas some school administrators fear that placing an emphasis on suicide prevention will shift the school's primary focus away from academics. Other explanations for the lack of suicide prevention programs in schools include a lack of support from the school administration team, a lack of adequate time to provide the services all together, or an overreaching opinion that these types of prevention programs are not needed at that particular school. In their study of the prevalence of suicide awareness and prevention programs in schools, Gibbons and Studer (2011) found that only 19.1% of school counselors reported that they implemented suicide awareness programs in their schools. Most school counselors (72%) reported that they did not provide school staff with development opportunities regarding adolescent depression or

suicide. Overall, the results of the study indicated that organized training on suicide awareness does not occur as much as it should in K-12 schools.

This is not to say, however, that there is a lack of suicide prevention and intervention training models that are available for schools to use. Applied Suicide Intervention Skills Training (ASIST) is one suicide intervention training model that has been recognized by the Centers for Disease Control (CDC), and has been used by multiple branches of the U.S. Armed Forces (Shannonhouse et al., 2017). The program takes 14 hours to complete and is typically conducted over a 2-day period. Turley and his colleagues (2001) found that ASIST leads to significant improvements in suicide risk assessment skills, increased knowledge about the suicide process and its development, and increased knowledge regarding the application of suicide intervention procedures.

Shannonhouse et al. (2017) conducted a study on ASIST and its impact attitudes about suicide, the comfort in dealing with suicide, and the suicide intervention skills of school personnel in an educational setting. Results indicated that teachers and school staff members who received ASIST training opportunities felt more comfortable and confident in working with students who expressed suicidal intents, as well as experienced significant increases in suicide intervention skills. Furthermore, individuals who received ASIST training opportunities developed more helpful attitudes and beliefs about suicide that enabled them to successfully intervene when sought out for help. These results emphasize the importance of implementing suicide awareness and prevention programs in elementary and secondary schools—if school personnel are given professional development opportunities in this area, they will be more ready, willing, and able to respond appropriately to suicidal students of all ages.

Davidson and Range (1999) examined the extent to which teachers would be responsive to suicide prevention training programs. From their sample of 75 full-time practicum teachers, they found that most participants were willing to take suicide threats seriously and to take appropriate actions to prevent suicide after being provided with a teacher in-service training session on suicide and the risk factors and warning signs. Overall, their results indicated that teachers responded positively to suicide prevention programs that lasted only 1 hour. The task, then, is to ensure that schools and administrators are taking the appropriate steps to guarantee that these beneficial programs are implemented throughout secondary schools.

Student Training. While it is important that school staff members are adequately trained on how to work with depressed and/or suicidal students, it is also imperative that students are made aware of the signs and symptoms of adolescent depression and suicide. Adolescence is a time where an individual's peer group plays an important role in self-disclosure and personal development. Adolescents typically confide in and go to their peers for help as opposed to their parents and/or other adults or authority figures (Scherff et al., 2005; Linson et al., 2014). Therefore, it is crucial that adolescents are made aware of depression and suicide and the ways in which they can manifest themselves in their peers. Educating adolescents on what these behaviors look like in action can prepare students to act appropriately if and when a peer comes to them for assistance.

However, despite the need for educational programs that prepare adolescents for these circumstances, schools typically do not have training programs for students in the areas of adolescent depression and suicide. According to Gibbons and Studer (2011), a

majority of school counselors (54.8%) reported that their schools only provide information to students on suicide and depression when students come to them individually for help. Only 17.9% of school counselors reported providing classroom-based guidance on suicide awareness, whereas another 17.9% of school counselors reported a lack of any formal training for students. The general impression from the Gibbons and Studer (2011) study is that suicide awareness information is provided to students on a largely as-needed basis. In other words, suicide prevention for most schools in the U.S. rests largely on a reactive rather than a proactive platform. Schools generally provide assistance to students only after a problem has been recognized or brought to administrators' attention—suicide awareness training becomes a reaction to an already-existing issue. Clearly, depression and suicide intervention should be done in a more proactive fashion with an emphasis on screening and identifying students at risk for the development of depression and/or suicidal thoughts or actions. Problem identification must be done as early as possible—preferably before the issue has escalated and become a hazard to the student and/or others.

Scherff and his colleagues (2005) found that students who are exposed to curriculum-based suicide prevention programs show significant improvement in their knowledge of suicide and the warning signs. However, despite state legislators' and school board committees' willingness to agree that adolescent suicide is a problem that must be addressed, school administrators remain hesitant to implement such programs within the schools (Scherff et al., 2005). Several reasons for this reluctance exist, including the fear that presenting information on suicide to students will "normalize" the act and make suicide a viable option for students in stressful situations. Another reason

for administrator hesitation concerns financial constraints. School and state budgets often limit a school's ability to implement school-wide suicide prevention programs. In 2005, only three states had allotted funds specifically for such programs in secondary schools (Scherff et al., 2005). In 2014, however, the American Foundation for Suicide Prevention (AFSP) conducted a study and revealed that 10 states had mandated annual suicide prevention training for school personnel and provided funding for such training, 17 states had mandated and allotted funds for training on suicide prevention in schools but this training was not annual, and 15 states encouraged school personnel to seek training on adolescent suicide prevention on their own and funds are made available if school personnel want to use them (American Foundation for Suicide Prevention; AFSP, 2016). Illinois was listed as one of the states that has mandated suicide prevention training and allotted funds for such training, but the training is not annual. While these statistics were far better than the 2005 data previously mentioned, there were still only half of the states in the country that mandated suicide prevention programs in the school system. The other half of the country continued to view suicide prevention training for school personnel as optional or not needed.

Regardless of the issues associated with implementing suicide prevention programs for students, research has clearly indicated the positive impact of prevention programs on students' awareness of suicide warning signs and risk factors. Furthermore, because the adolescent period is associated with such strong connections to peers rather than to adults, it is important that students are educated on depression and suicide and the way in which their peers can display suicidal behaviors.

Knowledge and Attitudes about Adolescent Depression and Suicide

Several studies have examined the degree to which various groups of individuals accept suicide, and to assess the overall attitudes about and knowledge of suicide that various groups of individual possess. For example, Linson and his colleagues (2014) examined adolescents' capacity to identify and report depression and suicide-related clues that may lead to the prevention of suicide among their peers. In a sample of 1,200 adolescents, 36% of students reported having adequate knowledge of suicide prevention. Furthermore, suicide clue identification scores were low, with roughly 20-30% of adolescents reporting an ability to identify signs and symptoms of suicide, whereas 35% of students reported actually disclosing suicidal concerns to individuals trained to intervene. High school students who reported being exposed to suicide information were more likely to have knowledge and to report suicidal concerns to others. The results of this study emphasize the need for more structured education programs regarding depression and suicide for adolescent populations. Linson and his colleagues concluded that better educating adolescents on the risk factors, intervention strategies, and the identification of the signs of suicidal ideations may reduce the number of adolescent suicides.

In a similar study, Cerel and her colleagues (2013) examined the attitudes and experiences of college students with regard to suicide and those affected by it. They also examined which demographic characteristics might have been related to exposure to suicidal behavior, attitudes, perceptions, and behavioral intentions. Their results indicated that a large majority of surveyed students (85%) agreed or strongly agreed that

suicide is preventable. However, undergraduate students were far more likely than graduate students to see suicide as preventable.

Cerel and her colleagues also found that suicide survivors, those self-identified as surviving the suicide of a loved-one, were more likely to believe that suicide was and is a problem among college-aged students. Women and Caucasian students were also more likely to agree that suicide was and is a problem among college-aged individuals. They also found that 80% of college students agreed or strongly agreed that most individuals who attempt or complete suicide show warning signs. Not surprisingly, students who had experienced a suicide-related death or attempt were also more likely than other participants to believe that suicidal thoughts and actions were common among college-aged individuals. Among this sample of individuals, results largely indicated that considering oneself as a suicide survivor and/or knowing someone who had attempted or completed suicide significantly impacted overall attitudes and knowledge of suicide. Cerel and her colleagues' findings support the need for improved prevention resources on college campuses. A large majority of students in this sample reported knowing someone who completed or attempted suicide or reported attempting suicide themselves. Suicide occurs frequently among college-aged populations and thus more intensive and empirically supported prevention programs need to be instituted in order to educate students about where they can go with suicidal concerns for a friend or family member. As suicide is common among college-aged individuals, it is important to educate students early on about the risks and consequences associated with depression and suicide ideation.

In a study of school psychologists' training in preparation for crisis intervention, Allen and her colleagues found that 91% of respondents indicated that their schools had crisis response plans and roughly 53% of school psychologists reported that they had been members on their school's crisis response team. However, only 37% of respondents reported having any coursework in crisis intervention prior to becoming a licensed school psychologist, and only 58% of the school psychologists who did report having this coursework indicated that they felt only minimally prepared for crisis intervention.

In a similar study, Debski and her colleagues (2007) examined the level of preparedness and involvement of school psychologists in suicide prevention efforts in secondary schools. In a sample of 162 school psychologists identified through the National Association of School Psychologists (NASP), 99% of respondents indicated that they had received some sort of training in the assessment of suicide risk. However, only 40% of participants reported having received this training as a part of their graduate coursework. Of the participants who did not receive any type of suicide assessment training throughout their graduate coursework, they generally received training through workshops, self-studies, in-services, etc. Participants reported on how prepared they felt to provide assistance to students who were potentially suicidal. Fifty percent of participants reported that they felt somewhat prepared and 43% reported that they felt well prepared, whereas 6% reported that they did not feel prepared at all to handle potentially suicidal students. Overall, the results of this study indicate that NASP members are typically knowledgeable of suicide risk factors and warning signs and are typically involved in school crisis intervention teams.

According to Debski and her colleagues (2007), it is important for school psychologists to be involved and knowledgeable about how to respond to students who are potentially suicidal. Additionally, school psychologists should be able to respond in ways that are consistent with the standard of care for professional practices. School psychologists should be able to respond appropriately to potentially suicidal students because these practitioners will lead the way for other school staff to act accordingly. A lack of knowledge on the part of school psychologists in situations involving school crises can add to the sorrow and self-doubt of the individuals who knew the deceased, including the teachers, principals, and counselors within the school system.

Shilubane and her colleague (2015) conducted a qualitative study in which they examined the overall knowledge, skills, and training needs of South African teachers regarding adolescent suicide. They interviewed 50 teachers and asked them questions about their knowledge of and readiness to handle adolescent suicide. When asked if they knew what factors had influenced students to commit or attempt suicide, none of the participants reported having any knowledge of these factors. Teachers also reported being afraid to discuss a suicidal event with their students. Only two teachers out of the 50 in the interview reported going back to discuss the death of a peer with their students. Participants also answered questions asked about any curriculum-based suicide awareness programs in their schools or resources that were available to help survivors of suicide. Almost all teachers indicated that no curriculum-based programs were in place to educate students and staff on suicide and the risk factors and warning signs of it, and almost all teachers indicated that there were also no services available in the schools to help suicide survivors. Overall, findings from this study indicated that high school

teachers showed a general lack of knowledge of the warning signs and risk factors associated with suicidal behavior. Some teachers reported noticing warning signs of suicide but later reported that they did not know that those behaviors were indicative of potentially suicidal behavior at the time. Because teachers spend so many hours per day with students, it is important that they are familiar with the warning signs, risk factors, and intervention skills needed to interfere with potentially suicidal adolescents.

The Present Study

To date, research has yet to be conducted that examines U.S. secondary school teachers' and administrators' attitudes toward intervening with a potentially depressed and/or suicidal student. Additionally, research is needed to identify the demographic characteristics among educators that are associated with general knowledge of adolescent suicide and the risk factors and warning signs that often accompany it. The purpose of the present study was to examine the demographic characteristics that best predict secondary teacher and administrator attitudes and knowledge of adolescent depression and suicide. Two hypotheses were examined in the present study:

1. Certain characteristics (e.g., gender, years of experience with educating children, the amount of training received on adolescent depression/suicide, and knowledge of adolescent suicide and depression) are better predictors of attitudes toward adolescent depression and suicide.
2. Teachers and administrators who are more knowledgeable about adolescent depression and suicide are more likely to report more positive attitudes toward preventing these acts within the school setting.

Method

Participants

The total number of participants for the study was 122, including 101 teachers (71 women and 31 men), 14 administrators (8 men, 4 women, 2 preferred not to respond), and 7 staff members (7 women) from secondary schools across Illinois. Participants' total number of years of experience educating children ranged from less than 1 year to 40+ years ($M = 16.19$, $SD = 9.18$). As previously stated, Illinois was listed by the American Foundation for Suicide Prevention (AFSP, 2016) as one of the states that has mandated suicide prevention training and allotted funds for such training, but the training is not annual. A number of states, including Alaska, Delaware, Georgia, Kentucky, Kansas, Nebraska, North Dakota, Tennessee, and Texas mandate annual suicide prevention training for school officials (AFSP, 2016). Illinois, on the other hand, requires all school personnel to participate in suicide prevention programs, although the training is not annually renewed. It is unclear when Illinois school officials receive this training and whether they are in fact attending these training programs and receiving the appropriate amount of instruction on depression and suicide prevention for adolescents. The amount of training individuals receive is going to impact their attitudes, knowledge, and confidence in addressing depressed and suicidal students in the school system. Due to the ambiguity of Illinois' policy for mandated suicide prevention training for school officials, the present study focused on school officials in Illinois. By strictly limiting participation to individuals in Illinois, data obtained from the surveys highlighted not only the amount of training that school officials have received in the past but also the

amount of knowledge that Illinois school officials have gleaned from these mandated suicide prevention training programs.

Potential participants were contacted via email. After obtaining permission from the school principals to contact teachers and other administrators in the schools, an email was sent to teachers and administrators that included basic information about the nature of the study. The email, which included a link to the online survey, also informed potential participants that their involvement in the study was voluntary, and that they could withdraw from the study at any point without penalty.

Materials and Procedure

The study was approved by the Institutional Review Board (IRB) at Eastern Illinois University. Before accessing the survey itself, teachers and administrators were informed that their responses to all items would be kept confidential. Participants then indicated their consent to participate in the study by choosing the "I agree" option on the informed consent page (Appendix A) of the online survey.

On a brief demographic form (Appendix A), teachers and administrators reported their gender, years of service educating students, job title (e.g. teacher or administrator), and the training he/she has received in suicide prevention (as indicated by the number of hours spent in training situations). Participants then completed four surveys designed to assess their knowledge and attitudes about adolescent depression, suicide, and prevention: the Depression Stigma Scale (DSS), the Stigma of Suicide Scale (SOSS), the Attitudes to Suicide Prevention Scale (ASPS), and the Suicide Knowledge Survey (SKS).

The Depression Stigma Scale (DSS). The DSS, developed by Griffiths, Christensen, Jorm, Evans, and Groves (2004), consists of 2 subscales: the Personal

Stigma subscale and the Perceived Stigma Subscale; participants completed only the Personal Stigma Subscale. The subscale consists of 9 items designed to measure an individual's attitudes, or stigma, toward adolescent depression. The Personal Stigma Subscale of the DSS requires participants to indicate how strongly they agree with each of the 9 statements on a 5-point Likert scale ranging from 1 = Strongly Disagree to 5 = Strongly Agree. The scale includes items such as "People with depression could snap out of it if they wanted", "Depression is not a real medical illness", and "People with depression are unpredictable". Higher scores on the subscale indicate more negative attitudes toward depression. Test-retest reliability estimates indicate that the scores remain largely consistent across time ($r = 0.71$). Internal consistency estimates indicate that the 9 items measure the same construct ($\alpha = 0.75$—0.82). Convergent validity analyses indicate that scores on the Personal Stigma Subscale and another measure purported to assess stigma toward depression (the Social Distance Scale) correlated moderately with one another ($r = 0.53$). Divergent validity analyses indicate that the Personal Stigma Subscale and the Perceived Stigma Subscale, a measure purported to assess an individuals' perception of how other people perceive and feel about depression, correlated only slightly with one another ($r = 0.12$).

The Stigma of Suicide Scale (SOSS). The SOSS, developed by Batterham, Calear, and Christensen (2013), is designed to assess an individual's attitude toward people who attempt or commit suicide. There is a long version (58 items) and a short version (16 items) of the SOSS. Because four separate survey scales are being used to gather information about depression and suicide in the current study, the short version of the SOSS was used in order to reduce the amount of time for participants to complete all

instruments. This scale has 3 themes: Stigma, Isolation/Depression, and Glorification/Normalization. Participants rated their level of agreement with statements about individuals who take their own lives using a 5-point Likert scale ranging from 1 = Strongly Disagree to 5 = Strongly Agree. The scale includes items such as "In general, people who suicide are... Pathetic", "Irresponsible", "Brave", and "Cowardly". Higher scores on the scale indicate more negative attitudes toward individuals who attempt and/or complete suicide. According to Batterham and his colleagues (2013), internal consistency analyses indicate that the items in the 3 subscales contain items that measure the same construct—stigma of suicide ($\alpha = 0.70$).

The Attitude to Suicide Prevention Scale (ASPS). The ASPS, developed by Herron, Ticehurst, Appleby, Perry, and Cordingley (2001), is designed to assess an individual's attitudes toward preventing suicide. The scale consists of 13 statements for which participants indicate their level of agreement on a 5-point Likert scale ranging from 1 = Strongly Agree to 5 = Strongly Disagree. The scale includes items such as "I resent being asked to do more to prevent suicide", "If people are serious about committing suicide, they don't tell anyone", and "If a person survives a suicide attempt, then this was a ploy for attention". Higher scores indicate more negative attitudes toward suicide prevention. According to Herron and her colleagues (2001), internal consistency analyses using Cronbach's alpha indicate that the 13 items on the questionnaire measure the same construct—attitudes on preventing suicide ($\alpha = 0.77$). Test-retest reliability estimates indicate that scores on the scale remain consistent across time ($r = 0.85$).

The Suicide Knowledge Survey (SKS). The SKS, developed by Smith, Silva, Covington, and Joiner (2014), consists of 9 items that are designed to assess an

individual's knowledge of suicide by indicating whether each statement is true or false. The scale was based on the 100-item Suicide Options Questionnaire (SOQ) that consisted of 8 subtests and was empirically validated with high internal consistency estimates. However, Smith and her colleagues reduced the scale to 9 items in order to obtain a shorter assessment by choosing items from the Suicide Options Questionnaire that paralleled the purpose of the study—assessing participant knowledge of suicide. Thus, the Suicide Knowledge Survey was developed. The scale includes items such as "Few people want to kill themselves", "If a person is serious about suicide, there is little that can be done to prevent it", and "Depression indicates a suicide risk". Higher scores on the scale indicate a more accurate understanding of suicide and the factors typically associated with it. According to Smith and her colleagues (2014), internal consistency estimates for the Suicide Knowledge Survey were calculated to evaluate the reliability of the scale using the Kuder-Richardson Formula 20 (KR20) because responses to survey items are binary in nature ($\alpha = 0.50$). The low alpha reflects the reduction of items from the larger questionnaire to the smaller survey. The knowledge items that form the short Suicide Knowledge Survey were randomly selected from the long version of the survey and thus cannot be expected converge or measure the same construct well.

All four questionnaires were combined into one 47-item survey. Once permission was obtained from school principals, teachers and administrators in Illinois secondary schools received an email with the link to the online survey. Participants completed the survey through Qualtrics, an online survey system.

Statistical Treatment

Multiple regression analyses were conducted to determine which characteristics (e.g. gender, years of experience educating children, job title, amount of training on depression/suicide, and knowledge of adolescent suicide) were the best predictors of more negative attitudes toward adolescent depression and suicide. Multiple regression analyses were also used to determine which characteristics (e.g. gender, years of experience educating children, job title, amount of training on depression/suicide, and knowledge of adolescent suicide) were the best predictors of participants' attitudes about suicide prevention in situations involving adolescent suicide.

Correlation matrices produced from the multiple regression analyses were also examined. Of greatest interest in the current study were the correlations among participants' attitudes about adolescent depression and suicide, knowledge of adolescent suicide, attitudes about preventing adolescent suicide, and demographic items.

Results

From the original sample of 143 surveys, 21 were discarded due to incomplete responses. Descriptive statistics were examined for each of the four surveys used in the study: The Depression Stigma Scale (DSS), the Suicide Stigma Scale (SSS), the Attitude toward Suicide Prevention Scale (ASPS), and the Suicide Knowledge Survey (SKS). A mean score of 18.03 ($SD = 4.52$) out of 45 possible points on the DSS indicated an overall low level of stigma toward depression in adolescents among Illinois teachers and administrators who completed the survey. A mean score of 37.21 ($SD = 8.08$) out of 80 possible points on the SSS indicated an overall low level of stigma toward suicide in adolescents among the respondents. A mean score of 49.47 ($SD = 5.53$) out of 65

possible points on the ASPS indicated a moderately positive attitude toward suicide prevention among the respondents. A mean score of 6.18 (SD = 1.21) out of 9 possible points on the SKS indicated that Illinois teachers and administrators who completed the survey were somewhat knowledgeable about adolescent depression and suicide.

A multiple regression analysis was conducted to determine how well the following characteristics predicted participants' scores on the Depression Stigma Scale (DSS): gender, number of years of experience educating children, number of hours of professional development training received on adolescent depression and suicide, and knowledge of adolescent depression and suicide as indicated by participants' Suicide Knowledge Survey (SKS) total score. Results indicated that this set of predictors accounted for 9% of the variance in overall DSS scores, F (4, 117) = 2.87, p = 0.03. Total scores on the Suicide Knowledge Survey (SKS) accounted for most of the variance (7%). Greater knowledge of adolescent depression and suicide was associated with less stigmatizing attitudes toward adolescent depression in Illinois teachers and administrators, $p < 0.001$. None of the other predictors were statistically significant. A summary of the results of this analysis can be found in Table 1.

A multiple regression analysis was conducted to examine how the following characteristics predicted scores on the Suicide Stigma Scale (SSS): gender, number of years of experience educating children, number of hours of professional development training received on adolescent depression and suicide, and knowledge of adolescent depression and suicide as indicated by participants' scores on the Suicide Knowledge Survey (SKS). Results indicated that this set of predictors accounted for 10% of the variance in overall SSS scores, F (4, 117) = 3.36, p = 0.01. SKS scores accounted for

most of the variance (7%). Greater knowledge of adolescent depression and suicide was associated with less stigmatizing attitudes toward adolescent suicide in Illinois teachers and administrators, $p = 0.004$. None of the other predictors were statistically significant. A summary of the results of this analysis can be found in Table 2.

Another multiple regression analysis was conducted to examine how the following characteristics predicted scores on the Attitude towards Suicide Prevention Scale (ASPS): gender, number of years of experience educating children, number of hours of professional development training received on adolescent depression and suicide, and knowledge of adolescent depression and suicide as indicated by participants' scores on the Suicide Knowledge Survey (SKS). Results indicated that this set of predictors accounted for 11% of the variance in overall ASPS scores, $F(4, 117) = 3.60, p = 0.01$. SKS scores accounted for most of the variance (8%). Greater knowledge of adolescent depression and suicide was associated with more positive attitudes toward suicide prevention, $p = 0.001$. None of the other predictors were statistically significant. A summary of the results of this analysis can be found in Table 3.

Discussion

The current study was designed to examine two separate hypotheses. The first hypothesis was that certain characteristics (i.e. gender, years of experience with educating children, the amount of training received on adolescent depression/suicide, and knowledge of adolescent suicide and depression) would be better predictors of participants' level of stigma toward depression and suicide. This hypothesis was confirmed, in that a multiple regression analysis showed that knowledge of depression and suicide was the best predictor of participants' scores on the Depression Stigma Scale

(DSS). A likely explanation for this finding is that teachers and administrators with greater knowledge of depression understand that depression is not something that adolescents can simply "snap out of." Rather, depression can be a debilitating psychological condition that oftentimes can only be treated effectively with a combination of psychotherapy and medication (de Jonge-Heesen et al., 2016; Jha et al., 2017; Moreh & O'Lawrence, 2016). Greater knowledge of depression and the impact it can have on students' emotional, behavioral, and academic success may elicit a more empathetic response from teachers and administrators alike. Ultimately, greater knowledge of adolescent depression may help school professionals feel more prepared to work with students who come to them with these sorts of difficulties or concerns.

Additionally, results of the multiple regression analysis that used the same characteristics to predict participants' scores on the Suicide Stigma Scale (SSS) showed that greater knowledge of adolescent depression and suicide was also the best predictor of participants' scores on the Suicide Stigma Scale. Greater knowledge of adolescent depression and suicide was associated with less stigmatized attitudes toward adolescent suicide. One explanation for this finding is that teachers and administrators with greater knowledge of adolescent suicide have a clearer understanding of the risk factors that lead to suicide ideation, plans, and attempts. Furthermore, school professionals with greater knowledge of adolescent suicide are likely to understand the connection between depression and suicide. Research has indicated that 89-96% of adolescents who have had suicidal thoughts or who have attempted suicide suffer from at least one psychological disorder diagnosed in the DSM (Hooper et al., 2015; Lewinsohn et al., 1993; Lewinsohn et al., 1994; Moreh & O'Lawrence, 2016; Nock et al., 2013). Overall, greater knowledge

of adolescent depression and suicide and how these conditions impact the adolescent population may highlight the importance of showing empathy and providing support to students who reveal thoughts or plans related to suicide.

The second hypothesis was that teachers and administrators with greater knowledge of adolescent depression and suicide would be more likely to report positive attitudes toward implementing prevention programs for depression and suicide in the school setting. Results of a multiple regression analysis confirmed this hypothesis, in that knowledge of adolescent depression and suicide was the best predictor of participants' scores on the Attitudes Toward Suicide Prevention Scale (ASPS). Greater knowledge of depression and suicide in adolescents was associated with more positive attitudes toward suicide prevention. One explanation for this finding is that school professionals who are more knowledgeable about depression and suicide in adolescents are more likely to understand the need for developing and implementing appropriate prevention programs. Research has suggested that school-wide curriculum-based programs, in-service training for teachers and staff members, and school-wide screening programs are all effective tools for identifying students at risk for or currently suffering from depression and/or suicidal ideation (Davidson & Range, 1999; Gibbons & Studer, 2008; Gibbons & Studer, 2011; Shannonhouse et al., 2017). Prevention programs have also been effective in increasing the amount of knowledge teachers, administrators, and students have regarding depression and suicide, and the impact these conditions can have on individuals, families, and communities (Gibbons & Studer, 2008; Gibbons & Studer, 2011; Shannonhouse et al., 2017).

Additionally, results from Pearson's r correlation coefficients indicate that teachers and administrators who are more knowledgeable about depression and suicide in adolescents are more likely to have positive attitudes regarding suicide prevention. These results are consistent with those from the multiple regression analyses. A likely explanation for this finding is that school professionals with greater knowledge of depression and suicide are in a better position to understand the risks associated with depression and suicide, the negative impact depression and suicidal ideation can have on students, and the need for greater prevention efforts.

The finding that school professionals with greater knowledge of adolescent depression and suicide have less stigmatized attitudes toward depression and suicide, as well as more positive attitudes toward suicide prevention in the school setting, suggests a need for further research. Additional research is needed to determine which strategies are most effective in increasing school professionals' knowledge of depression and suicide. The current findings indicate that greater knowledge of depression and suicide is associated with decreased stigma toward depression and suicide, and more positive attitudes toward suicide prevention efforts. Therefore, future research should examine the best methods for educating teachers, administrators, and other school professionals on the risk factors associated with depression and suicide, as well as the implications and possible educational impact of these conditions.

The finding that school professionals with greater knowledge of adolescent depression and suicide have less stigmatized attitudes toward depression and suicide as well as more positive attitudes toward suicide prevention in the school setting also suggests that there is a need for more professional development opportunities focused on

training school professionals to recognize the signs of adolescent depression and suicidal tendencies. Training programs designed to prepare teachers and administrators to enter the school system produce generally competent and able professionals. However, training in the area of adolescent depression and suicide is not typically included in the curricula of these programs (Debski et al., 2007; Linson et al., 2014; Shilubane et al., 2015). Once they formally enter the school setting, teachers and administrators should be given ample opportunities for professional development (e.g., workshops, conferences, in-service presentations, etc.) in the area of adolescent depression and suicide.

The current study does have some limitations, however. Although the rationale for using only Illinois teachers and administrators in the study was sound, this strategy likely compromises the generalizability of the findings to school professionals in other geographical areas. Another limitation of the study is the relatively low number of administrators who responded to the survey. Although the study was designed to survey both teachers and administrators in secondary schools in Illinois, only 14 administrators completed the survey. The lack of administrator participation is likely due to the fact that teachers far outnumber administrators in the school system. This could be considered a limitation of the study as the lack of administrators did not allow for some comparisons that were originally intended. Another limitation of the study was the self-report nature of the data collected. Research shows that self-report data is subject to issues with social desirability—individuals may "fake good" and answer questions to make themselves seem more socially appropriate (Smith et al., 2018).

Overall, the findings suggest that Illinois teachers and administrators generally do not have stigmatized attitudes toward adolescent depression and suicide, they have

generally positive attitudes toward suicide prevention, and their knowledge of adolescent depression and suicide is the best predictor of attitudes toward these conditions. In summary, teachers and administrators who had greater knowledge of adolescent depression and suicide reported less stigmatized attitudes toward these conditions, and more positive attitudes toward prevention programs in the school setting.

Results from this study suggest a need for greater training programs on adolescent depression and suicide. School personnel spend a considerable amount of time with adolescents each day. Therefore, it stands to reason that these individuals are in a unique position to positively impact students who are suffering from depression and suicide ideation.

Research on training programs for adolescent depression and suicide are abundant. However, many school systems do not implement these programs. At the very least, the present study should highlight the importance of training school personnel to effectively handle students who come to them with depressive symptoms and/or suicide ideation.

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Table 1: Summary of Multiple Regression Analysis of Variables Predicting DSS Total Scores ($N = 122$)

Variable	*B*	*SE B*	β	*t*	*p*
Gender	-0.73	0.86	-0.08	-0.86	0.39
# Years Educating Children	0.03	0.04	0.06	0.71	0.48
# Hours of Professional Development	0.02	0.03	0.05	0.59	0.56
SK Total Score	-1.01	0.33	-0.27	-3.05	< 0.001

Note: $R^2 = 0.09$; adjusted $R^2 = 0.06$

Table 2. Summary of Multiple Regression Analysis of Variables Predicting SSS Total Scores (N= 122)

Variable	B	$SE\ B$	β	t	p
Gender	-2.38	1.52	-0.14	-1.57	0.12
# Years Educating Children	-0.10	0.08	-0.11	-1.23	0.22
# Hours of Professional Development	0.02	0.06	0.03	0.36	0.72
SK Total Score	-1.75	0.59	-0.26	-2.98	0.004

Note: $R^2 = 0.10$; adjusted $R^2 = 0.07$

Table 3: Summary of Multiple Regression Analysis of Variables Predicting ASPS Total Scores ($N = 122$)

Variable	*B*	*SE B*	*β*	*t*	*p*
Gender	1.08	1.04	0.09	1.05	0.30
# Years Educating Children	-0.02	0.05	-0.04	-0.42	0.68
# Hours of Professional Development	0.04	0.04	0.08	0.94	0.35
SK Total Score	1.35	0.40	0.30	3.38	0.001

Note: $R^2 = 0.11$; adjusted $R^2 = 0.08$

Appendix A

Consent to Participate in Research

You are invited to participate in a study conducted by Kayla Quick, a graduate student in the school psychology program at Eastern Illinois University under the supervisor of Professor William Addison from the EIU Psychology Department.

The purpose of this study is to examine college teacher and administrator knowledge and attitudes regarding adolescent depression, suicide, and prevention.

If you volunteer to participate in this study, you will be asked to provide demographic information (i.e., gender, years of experience with educating children, job title (e.g. teacher or administrator), the amount of training received on adolescent depression/suicide, and knowledge of adolescent suicide and depression) and complete a survey regarding adolescent depression and suicide containing 47 items rated on a Likert-type scale. This process will take you approximately 20 minutes.

There is little or no risk associated with participation in this study, and there are no incentives associated with participation. Possible benefits of participating in this study include a better understanding of the factors that relate to greater knowledge of adolescent depression and suicide as well as a greater understanding of factors that best predict more positive attitudes toward suicide prevention in adolescents

No one will have access to information that could be used to identify you, and the information to be collected will remain strictly confidential and will be disclosed only with your permission or as required by law.

Participation in this study is voluntary. If you volunteer take part in this study, you may withdraw at any time without penalty. You may also refuse to provide any information that you do not wish to provide.

If you have any questions or concerns about this research, please contact:

Dr. William Addison
217-581-6417
weaddison@eiu.edu (Email)

Kayla Quick
217-259-1615
knjacobs@eiu.edu (Email)

If you have any questions or concerns about the treatment of human participants in this study, you may call or write:

Institutional Review Board

Eastern Illinois University
600 Lincoln Ave.
Charleston, IL 61920
Telephone: (217) 581-8576
E-mail: eiuirb@www.eiu.edu

I voluntarily agree to participate in this study. I understand that I am free to withdraw my consent and discontinue my participation at any time. By continuing, I hereby give my consent to participate in this study.

Demographic Items

1. What is your gender?
    a. Male
    b. Female
    c. Prefer not to respond

2. What is your position?
    a. Teacher
    b. Administrator
    c. Other

3. How many years of service or experience do you have as an educator?

4. Have you ever participated in professional development workshops or trainings related to adolescent depression, suicide, and/or prevention?

    a. Yes
        i. How many hours of professional development training have you received on adolescent depression, suicide, and/or prevention?

        ii. How long has it been since your last professional development workshop or training on adolescent depression suicide, and/or prevention?
    b. No

The Depression Stigma Scale (DSS)

Please indicate your level of agreement with each statement.

1. Adolescents with depression could snap out of it if they wanted.

1	2	3	4	5
Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree

2. Depression is a sign of personal weakness.

1	2	3	4	5
Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree

3. Depression in adolescents is not a real medical illness.

1	2	3	4	5
Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree

4. Adolescents with depression are dangerous.

1	2	3	4	5
Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree

5. It is best to avoid adolescents with depression so you don't become depressed yourself.

1	2	3	4	5
Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree

6. Adolescents with depression are unpredictable.

1	2	3	4	5
Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree

7. If I had depression, I would not tell anyone.

1	2	3	4	5
Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree

8. I would not employ someone if I knew they had been depressed.

1	2	3	4	5
Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree

9. I would not vote for a politician if I knew they had been depressed.

1	2	3	4	5
Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree

The Suicide Stigma Scale (SSS)

Using the scale below, please rate how much you agree with the descriptions of adolescents who take their own lives (suicide). In general, adolescents who commit suicide are:

1. Pathetic

1	2	3	4	5
Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree

2. Shallow

1	2	3	4	5
Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree

3. Immoral

1	2	3	4	5
Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree

4. An embarrassment

1	2	3	4	5
Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree

5. Irresponsible

1	2	3	4	5
Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree

6. Stupid

1	2	3	4	5
Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree

7. Cowardly

1	2	3	4	5
Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree

8. Vengeful

1	2	3	4	5
Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree

9. Lonely

1	2	3	4	5
Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree

10. Isolated

1	2	3	4	5
Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree

11. Lost

1	2	3	4	5
Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree

12. Disconnected

1	2	3	4	5
Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree

13. Strong

1	2	3	4	5
Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree

14. Brave

1	2	3	4	5
Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree

15. Noble

1	2	3	4	5
Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree

16. Dedicated

1	2	3	4	5
Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree

The Suicide Knowledge Survey (SKS)

Indicate whether each statement is true or false.

1. Few people want to kill themselves.

1	2
True	False

2. Youth ages 10-24 have a significantly greater risk of suicide than individuals ages 65 or older.

1	2
True	False

3. The rate of suicide among those with severe mental illness is 6 times the general population.

1	2
True	False

4. If a person is serious about suicide, there is little that can be done to prevent it.

1	2
True	False

5. If you talk to a consumer about suicide, you may inadvertently give them permission to seriously consider it.

1	2
True	False

6. Depression indicates a suicide risk.

1	2
True	False

7. Suicide is always unpredictable.

1	2
True	False

8. Suicidal people want to die.

1	2
True	False

9. Individuals with Borderline Personality Disorder (BPD) frequently discuss or gesture suicide but do not really intend to kill themselves; instead they intend to provoke or manipulate others.

1	2
True	False

The Attitudes Toward Suicide Prevention Scale (ASPS)

Please indicate your level of agreement with each statement.

1. I resent being asked to do more to prevent suicide.

1	2	3	4	5
Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree

2. Suicide prevention is not my responsibility.

1	2	3	4	5
Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree

3. Making more funds available to the appropriate health services would make no difference to the suicide rate.

1	2	3	4	5
Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree

4. Working with suicidal students is rewarding.

1	2	3	4	5
Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree

5. If adolescents are serious about committing suicide, they don't tell anyone.

1	2	3	4	5
Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree

6. I feel defensive when people offer advice about suicide prevention.

1	2	3	4	5
Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree

7. It is easy for people not involved in clinical practice to make judgments about suicide prevention.

1	2	3	4	5
Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree

8. If an adolescent survives a suicide attempt, then this was a ploy for attention.

1	2	3	4	5
Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree

9. Adolescents have the right to take their own lives.

1	2	3	4	5
Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree

10. Since unemployment and poverty are the main causes of suicide, there is little an adolescent can do to prevent it.

1	2	3	4	5
Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree

11. I don't feel comfortable assessing an adolescent for suicide risk.

1	2	3	4	5
Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree

12. Suicide prevention measures are a drain on resources which could be more useful elsewhere.

1	2	3	4	5
Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree

13. There is no way of knowing who is going to commit suicide.

1	2	3	4	5
Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree